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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/697,947

10/31/2003

Nobuyuki Nonaka

SHO-0047

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09/14/2006

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EXAMINER

SHAH, MILAP

ART UNIT

PAPER NUMBER

3712

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/697,947

Applicant(s)

NONAKA, NOBUYUKI

Examiner

Milap Shah

Art Unit

3712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/9/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This action is in response to the amendment filed on August 21, 2006. The Examiner acknowledges that claims 1 & 2 were amended, claims 3-5 were canceled, and no new claims were added. Therefore, claims 1 & 2 are currently pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 & 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liang et al. (U.S. Patent Application Publication No. 2003/0016318).

Examiner Note: It is to be noted that claim 1, as amended, appears to include a majority of the limitations of canceled claims 3-5, in which the only new limitations pertain to the pitch. As per claim 1, it is now directed to a gaming machine having the "image display device" or display unit originally recited by claim 1. Therefore, the Examiner quickly reiterates that the intended use for the display device within a gaming machine is obvious, as discussed in the previous office action.

Claims 1 & 2: Liang et al. disclose the invention substantially as claimed including:

a color display unit having a pixel unit that is formed by arranged each one of a plurality of kinds of pixel electrodes that display predetermined colors (i.e. electrodes representing the colors red, green, and blue);

one pixel being constituted by a pair of adjacent pixels units or sub-pixels of the whole pixel (figure 3);

the pixels being arranged in a matrix in an “xy plane”, and as seen in figure 3, the pixel electrodes of the same color are arranged in the y direction and the same pattern is continuously arranged in the x direction to form a stripe (figure 3); and

an information signal that is sent to the pixel electrodes at the same time, to both sets of one of the plurality of colors, such as sending an information signal to both electrodes that represent the color red to enable both electrodes to present a red lighting at the same time (paragraphs 0017-0019).

Liang et al. explicitly lack disclosing the pitch is equal to $\tan(\pi/180/35)(d/2)(1+\alpha)$. In this equation: d is the distance at which the player views the display unit from in a normal posture, wherein specifically d is between 300-500 millimeters and α is a correction factor, wherein specifically α is $\pm 0.1-0.2$ (interpreted as adjusting the pitch by 10-20% in either direction).

A user of the display unit viewing the display at a distance d from the display unit, wherein d is between 300-500 millimeters or 11.81-19.69 inches, respectively, would have obvious to any person of ordinary skill in the art or any person at all really. One would be motivated to use a d as set forth for at least two simple reasons: (1) most user's arms are not much longer than 3 feet or 914 mm, thus, for comfortability of the user, the user would obviously need to be seated at least half way closer than their arm span to use the display unit and any associated hardware. (2) the average person cannot sit too close to a display unit, such as 3 inches away or sit too far from the display, such as 10 feet away, for the simple reason that eyes get irritated in either situation, as they're being overused and stressed

to focus on what is shown on the screen, thus, for comfortability of the user, the user would obviously need to be seated at a reasonable distance to view the contents of the display, and in a gaming device environment. Therefore, the Examiner submits that specifying a distance, d , being 300-500mm would have been obvious to one of ordinary skill in the art in order for a user to interact with the display and still be a comfortable distance away, such that the user's eyes do not get irritated.

A pitch, as notoriously well known and defined in the art, is the distance between the pixel units. When implementing the given equation of pitch and using the lowest most and highest most correction factor, the range of pitches appears to be 0.12 mm to 0.2989 mm. These values are well known "average" pitch values, such that one of ordinary skill in the art would find it obvious to have the pitch at the lower end of the range when a user is at a closer distance and further away when the user is at a further distance from the display unit, so that a user can make out what is on the screen. For instance, if the dot pitch used was at the high end of 0.2989 mm and the user was around 300 mm away, everything would look very big to the user, putting stress on the eyes. The vise versa would be true at a pitch of 0.12 and a distance of 500, everything would be too small. Thus, it appears, the claimed formula is used to mask the end result of having well-known average pitch values as the range of possible pitch values.

Therefore, it would have been obvious to one of ordinary skill in the art to modify Liang et al. to implement the specific the formula discussed above or any equivalent formula, using the range of 300-500 mm as the distance away the user's eyes are, to obtain the same average well-known range of pitch values in order to provide a display unit with suitable sharpness and viewability for users of a gaming machine, who need to be retained for their

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long-term use of the gaming machine, which generates revenue for the gaming establishment.

It should be noted that the Applicant may submit evidence to show that the claimed ranges are critical, such as the claimed ranges may achieve unexpected results relative to what the Examiner has stated is well known in the art. See MPEP 2144.05, section III. In the above rejection, the prior art is one of ordinary skill's knowledge in the art.

Response to Arguments

Applicant's arguments filed on August 21, 2006 have been fully considered but they are not persuasive. Since the arguments are solely based on the amended claims, a response to the arguments is incorporated in the updated rejections above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

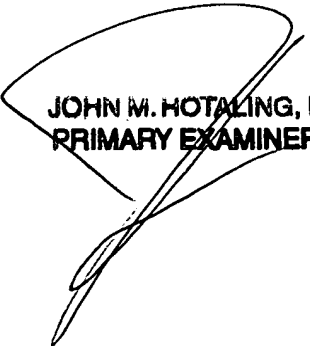
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Milap Shah whose telephone number is (571) 272-1723. The examiner can normally be reached on M-F: 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hotaling can be reached on (571) 272-4437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MB.S.


JOHN M. HOTALING, II
PRIMARY EXAMINER